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OFFICE OF  
AIR AND RADIATION

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CCD-01-24 (LDV/LDT/ICI/LIMO)

Dear Manufacturer:

SUBJECT: CFEIS Instructions: Electronic Application Processing (EAP) and Tier 2 Submissions

This letter provides guidance for entering electronic applications and Tier 2 data into EPA's CFEIS database. The Tier 2 submission instructions are ready to use now. We will begin industry-wide implementation of the EAP process on January 15, 2002, and will be testing the system prior to then. We also encourage those manufacturers who may be certifying three or more 2003 model year test groups prior to that date to begin using the new EAP system. Our CFEIS and compliance staff is ready to assist you as you implement these new instructions.

EAP

As you know, EPA requested that manufacturers submit their 2002 model year applications in electronic (PDF) format via compact discs, as outlined in manufacturer guidance letter CCD-00-18, September 18, 2000. Detailed instructions for the new electronic submission process are contained in Enclosure I. This change affects some CFEIS inputs, including eliminating the naming scheme for PDF files presented in Dear Manufacturer letter CCD-00-18.

For this electronic process to work efficiently, the file size of applications needs to be kept below a certain threshold. We've also included with this letter some tips for reducing the size of your PDF files (Enclosure II).

It is also recommended that each manufacturer create and maintain a "generic" (i.e., not employee-specific) email address which EPA can use to transmit information and, ultimately to deliver electronic certificates. An example of a format that would be appropriate is: [MFR]-Certificates@[mfr].com. Please submit your new address to the OMSCFEIS group email (OMSCFEIS@epa.gov).

Tier 2

Instructions for entering Tier 2 data into CFEIS are given in Enclosure III to this letter. Please begin using these now for any early Tier 2 certification.

If you have any questions about this letter, please contact your certification team representative.

Sincerely,

Gregory A. Green, Director  
Certification and Compliance Division  
Office of Transportation and Air Quality

Enclosures



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## ENCLOSURE I

### Guidelines for Electronic Application Submission (EAP)

The following instructions will allow manufacturers to submit certification applications to EPA in PDF format files via the existing CFEIS dial-up modem. Details for submitting these electronic files are provided below.

The basic method for submitting data to CFEIS remains. A few changes have been made to the file naming protocol and the contents to be included in the application PDF files. The "Release Date" field, previously optional, is now required for all FOI (nonconfidential) applications, to determine when those applications are available for public release.

#### Electronic Application File Naming

The naming scheme for PDF files specified in Dear Manufacturer letter CCD-00-18 no longer applies. A new data file called, "eap.in", that follows the CFEIS file naming scheme, has been created. This file holds record information regarding the description of the electronic application PDF file. It is to be submitted in the same way as any other CFEIS subsystem input file submission. Additionally, the PDF files must be included in the submission at the same time the "eap.in" file is submitted.

One improvement to the current system is that manufacturers may now use their own application file names (which will be used only for identification purposes) instead of the current long file name. The PDF files to be stored in EPA's computer system will be renamed by CFEIS based on the data entered in the "A1" record of the EAP (Electronic Application Processing) input data file "eap.in".

Application parts (Part 1 or Part 2) should be combined into one file and will no longer be referenced in the file name.

The data that CFEIS uses to determine the electronic application file name are:

Application section (column 14)	"T" or blank - Test Group Specific "C" - Common Section
Confidential Information Indicator (Columns 16-18)	"FOI" for public release "CBI" for confidential business information
Test Group (Columns 20-31)	Full Test Group name OR Five character name+"_COMMON" for common section
Application Type (columns 33-35)	"INI" for Initial application (Part 1) "UPD" for Update application (Part 1 update and Part 2 initial) "FIN" for Final application (Part 1 and Part 2)

The file name is assigned by CFEIS based on the following scheme:

AAA\_BBB\_CCC.PDF

where

AAA=CBI or FOI

BBB=Test Group name or the first 5 characters of Test Group name appended by  
"\_COMMON" and

CCC=Application type, i.e., INI, UPD or FIN.

Examples:

Test Group Nonconfidential

FOI\_1XXXV03.0VD0\_INI (initial Part 1 submission)

FOI\_1XXXV03.0VD0\_UPD (Part 1 update and Part 2 initial)

FOI\_1XXXV03.0VD0\_FIN (Part 1 and Part 2 final)

Test Group Confidential

CBI\_1XXXV03.0VD0\_INI (initial Part 1 submission)

CBI\_1XXXV03.0VD0\_UPD (Part 1 update and Part 2 initial)

CBI\_1XXXV03.0VD0\_FIN (Part 1 and Part 2 final)

Common Section Nonconfidential

FOI\_1XXXV\_COMMON\_INI (initial Part 1 submission)

FOI\_1XXXV\_COMMON\_UPD (Part 1 update and Part 2 initial)

FOI\_1XXXV\_COMMON\_FIN (Part 1 and Part 2 final)

Common Section Confidential

CBI\_1XXXV\_COMMON\_INI (initial Part 1 submission)

CBI\_1XXXV\_COMMON\_UPD (Part 1 update and Part 2 initial)

CBI\_1XXXV\_COMMON\_FIN (Part 1 and Part 2 final)

Manufacturer Application File Names

For submission purposes, manufacturers may use the file naming convention listed above or may use a name of their own design, (for example A.PDF for the FOI/Initial/Test Group-specific PDF file) as long as the contents of the PDF file matches what is entered in the "A1" record.

Revision File Names

Revisions, if necessary, may be submitted using the process code "V". Revision numbers will be determined by the software in sequential order and the file name will include the revision number in front of .PDF (indicated as "\_R#" , where # is the sequentially assigned number.) For example:

FOI\_1XXXV\_COMMON\_INI\_R3 (revision 3 of Nonconfidential Common Section Initial  
Part 1)

FOI\_1XXXV\_COMMON\_UPD\_R3 (revision 3 of Nonconfidential Common Section Part 1  
update and Part 2 initial)

General Instructions - (refer to the **EAP Input Data Record Layout** sheet at the end of this document)

- 1) Release date applies only to "FOI" portion of any application.
- 2) The PDF files may be named for the convenience of the manufacturers as long as the physical file name and the file name entered in the "A1" record match. The file names that are stored in EPA's computer system are constructed based on the data entered in "A1" record and not the physical file name entered by the manufacturer.
- 3) A manufacturer may enter one or more transactions in one EAP submission. Each transaction must contain data for one combination of Manufacturer, Model Year, Application Section (Test Group or Common Section), Confidentiality (FOI or CBI), and Application Type (Initial, Update or Final). Each transaction starts with an "A1" record and ends with a "ZZ" record. Up to 10 "AV" records can be placed between the "A1" and "ZZ" records. If the "A1" record contains an application file name (beginning in column 46), then the associated PDF file, with the same file name, must be provided in the submission subdirectory.

Process Code:

**ADD** ("A or blank") process code will allow a manufacturer to enter a new combination of Manufacturer Code, Model Year, Test Group Name (or first 5 characters of the Test Group Name for Common Applications), and Application Type. If this combination already exists, the software will reject the transaction.

The software will verify that the Manufacturer Code, Model Year, and Test Group Name (or first 5 characters of the Test Group Name for Common Applications) exist in the data base. The software will also verify that the Application Section, Confidential Information Indicator, and Application Type are valid and that the PDF file name entered in the "A1" record exists in the submission subdirectory. If a particular "A1" record fails the edit check, an error message will be issued and that "A1" record (and its associated PDF file) will not be stored and the transaction will be rejected.

**REVISION** ("V") process code may be used to submit a revised PDF file. This file will be stored, with the standardized file name generated by the system according the file naming examples shown above as the latest revised PDF file for the Manufacturer, Model Year, Confidentiality, Application Section, Test Group, and Application Type entered on the "A1" record.

The system will assign a sequential revision number to the EAP record created for each successful Revision transaction for a given combination of the Manufacturer code, Model Year, Confidentiality, Application Section (Test Group or Common) and Application Type.

**MODIFY** ("M") process code will allow the manufacturer to change the release date on the

latest version of the EAP record for the indicated Manufacturer, Model Year, FOI (default), Application Section, Test Group, and Application Type, i.e., the transaction will update the release date for the revision 3 record if there are original and revision 1 through revision 3 records; the revision 1 record if there are original and revision 1 record; the original record if there is original record only, etc..

**REPORT** ("P") process code may be submitted to generate a report on the Applications submitted. If only the manufacturer code and model year is entered, the report will contain all the data for all the test groups and common sections for that manufacturer and model year. If a twelve character Test Group Name is supplied, the report would contain all the applications for that test group for the manufacturer and model year indicated. If the shortened, five-character "Test Group" name is provided in a Print transaction, the report will contain all the data for the test groups and common sections belonging to the vehicle class indicated by the last character (fifth character of the name).

### **Examples of EAP submissions for the manufacturer "Tasmania" for the 2002 model year**

#### **Submission of Initial Application:**

PDF files in "/mfr/tasmania" subdirectory:

Confidential Test Group Initial application (A.PDF)

FOI Test Group Initial application (B.PDF)

Confidential Common section Initial application (C.PDF)

FOI Common section Initial application (D.PDF)

```
A1 0052 2002 T CBI 2TWXV03.5ABC INI A.PDF
ZZ
A1 0052 2002 T FOI 2TWXV03.5ABC INI 05302001 B.PDF
AV 2TWXE1109ABC
AV 2TWXR1020ABC
ZZ
A1 0052 2002 C CBI 2TWXV INI C.PDF
ZZ
A1 0052 2002 C FOI 2TWXV INI 05312001 D.PDF
ZZ
```

When the data is processed successfully, the PDF files will be renamed and stored in the EPA's computer system as follows:

A.PDF renamed as CBI\_2TWXV03.5ABC\_INI.PDF

B.PDF renamed as FOI\_2TWXV03.5ABC\_INI.PDF

C.PDF renamed as CBI\_2TWXV\_COMMON\_INI.PDF

D.PDF renamed as FOI\_2TWXV\_COMMON\_INI.PDF

If the PDF file name specified in an "A1" record cannot be found in the "/mfr/tasmania" subdirectory, the transaction with that "A1" record will be rejected and an error message will

be returned.

Note: If an "AV" record is provided which contains an Evaporative Family Name that does not exist in the data base, that "AV" record will be rejected with a warning message. The transaction will not be rejected for a bad "AV" record. If a duplicate evaporative name is found, it will be discarded with a warning message.

Submission of Update Application:

PDF files in "/mfr/tasmania" subdirectory:

A.PDF

B.PDF

C.PDF

D.PDF

**A1 0052 2002 T CBI 2TWXV03.5ABC UPD A.PDF**

**ZZ**

**A1 0052 2002 T FOI 2TWXV03.5ABC UPD 05302001 B.PDF**

**ZZ**

**A1 0052 2002 C CBI 2TWXV UPD C.PDF**

**ZZ**

**A1 0052 2002 C FOI 2TWXV UPD 05312001 D.PDF**

**ZZ**

When the data is processed successfully, the PDF files will be renamed and stored in the EPA's computer system as follows:

A.PDF renamed as CBI\_2TWXV03.5ABC\_UPD.PDF

B.PDF renamed as FOI\_2TWXV03.5ABC\_UPD.PDF

C.PDF renamed as CBI\_2TWXV\_COMMON\_UPD.PDF

D.PDF renamed as FOI\_2TWXV\_COMMON\_UPD.PDF

**Note:** The PDF files A.PDF and B.PDF should include **Part 1 Update and Part 2 Initial applications**. This is a change from the current procedure.

Submission of Final Application:

The same type of data as the update submission would apply except for the application type code which would be "FIN" instead of "UPD". The PDF files should include Part 1 and Part 2.

Revision of an application:

PDF files in "/mfr/tasmania" subdirectory:

FOI Test Group Update application (A.PDF)

**A1V0052 2002 T FOI 2TWXV03.5ABC UPD 06302001 A.PDF**

**ZZ**

The PDF file **A.PDF** in the subdirectory /mfr/tasmania is a revised version of the FOI test group update (which includes Part 1 update and Part 2 initial application) application.

After the data is processed, the file will be stored in the system as FOI\_2TWXV03.5ABC\_UPD\_R1.PDF with the release date of June 30, 2001.

A submission to change the Release date

**A1M0052 2002 T FOI 2TWXV03.5ABC INI 06012001  
ZZ**

The above submission will change the release date of the latest version of the FOI test group initial application PDF file.

For changing release date and updating Evaporative family names

**A1M0052 2002 T FOI 2TWXV03.5ABC INI 06012001  
AVD2TWXE1109ABC  
AV 2TWXR1020ABC  
ZZ**

The above submission will change the release date for the FOI portion of the Test Group Initial application, delete the evaporative family 2TWXE1109ABC and add the evaporative family 2TWXR1020ABC.

For updating evaporative family names

**A1M0052 2002 T FOI 2TWXV03.5ABC INI  
AVD1GMXE1109ABC  
AV 1GMXR1020ABC  
ZZ**

Sample Incorrect submissions

***Example 1 - Release Date given for modification to a CBI application***

**A1M0052 2002 T CBI 2TWXV03.5ABC INI 06012001  
ZZ**

The above submission will be rejected because the release date applies only to FOI portion of an application.

***Example 2 - Release Date given for New CBI application***

**A1 0052 2002 T CBI 2TWXV03.5ABC INI 05302001 B.PDF  
ZZ**

The above submission will be accepted, but the release date will be ignored (release date applies to FOI document only). The PDF file will be stored in the system as CBI\_TWXV03.5ABC\_INI.PDF.

***Example 3 - Release Date not provided for FOI application***

**A1 0052 2002 T FOI 2TWXV03.5ABC INI B.PDF  
ZZ**

The transaction will be rejected because the required release date is missing.



## EAP Input Data Record Layout

### Electronic Application Processing Input Data Record Layout

Field Name	Record Type	Transaction Type				Position	Length	Data Type	Valid Range/Entry Criteria
		Add	Revis	Report	Modify				
Input Record Type	A1	R	R	R	R	1-2	2	A	A1
Process Code	A1	X	R	R	R	3-3	1	A	For Add: "A" or blank - " " For Revision "V" For Report "P" For Modify "M"
Manufacturer Code	A1	R	R	R	R	4-7	4	I	Valid MANUFACTURER CODE
Model Year	A1	R	R	R	R	9-12	4	I	1970-2100
Application section	A1	R	R		R	14	1	A	T or blank - Test Group Specific C - Common
Confidential Information Indicator	A1	R	R		R	16-18	3	A	FOI - For public release (default for "M" process code) CBI - Confidential
Test Group Name	A1	R	R	X	R	20-31	12	A	Valid Test Group Name or the first five characters of the Test Group Name for the Common Section application. The fifth character for the Common Section name should be: V - for Passenger vehicle T - for Truck B - for both
Application type	A1	R	R		R	33-35	3	A	INI - Initial UPD - Update FIN - Final
Release Date	A1	R	R		X	37-44	8	A	Valid Calendar date (MMDDYYYY) applies to Test Group (or the first 5 characters for a common section) and REQUIRED for any FOI Application
Application File Name	A1	R	R			46-	as required	A	Any name in CAPITAL letters and ending with .PDF. (The name of the file entered in the input subdirectory should also be in CAPITAL letters.)
Input Record Type	AV	X	X		X	1-2	2	A	"AV"
Process Code	AV	X	X		X	3-3	1	A	For Add: "A" or blank - " " For Deletion: "D"
Evaporative Family Name	AV	X	X		X	5-16	12	A	Valid Evaporative Family Name to be certified with the Test Group
Input Record Type	ZZ	R	R	R	R	1-2	2	A	End Transaction

## **Enclosure II**

### **Tips for Reducing the Size of Electronic Applications for Certification**

#### **1. General Guidelines:**

In general, there are two types of input which are included in applications for certification: graphical image and non-graphical image inputs. Scanned documents in image format (without optical character recognition (OCR) conversion) use much more file space than non-scanned documents, especially if scanned on high resolution, in color, etc. So wherever possible, use either the non-scanned document in the word processor or the scanned document using OCR conversion to text to generate a PDF file (using an appropriate PDF document generator). A side benefit of using non-scanned documents or scanned documents with OCR conversion to text is that the PDF file will be searchable using Adobe Acrobat Reader. (Creating the PDF file from scanned graphical image documents produces a document which is not searchable.)

#### **2. Scanning tips:**

Excessive use of scanned graphical image documents is not preferred, however some graphical imaging may be necessary to create the application for certification. For example, fee filing forms, EPA and manufacturer's signed letters, schematics, drawings, etc., will need to be scanned as images into the application file. To reduce file space, documents should be scanned into the PDF file as follows:

- Use an appropriate document generator (scanner). There are many different types of software packages available to generate PDF files. Choose one with the speed, quality, and accuracy of character recognition to meet your needs.
- For graphical images, use the lowest possible resolution, e.g. 150 dots per inch (dpi).
- For text documents, use the OCR conversion to produce a text document file.
- Some software packages such as OmniPage Pro 11 will process a document containing a combination of text and images and directly convert to PDF.
- Scan only in black-and white, not in color.

#### **3. Documents which should not be scanned in image format:**

To conserve file space, EPA CFEIS summary sheet reports, manufacturer's emission data reports, and other documents should be incorporated into the PDF document using the electronic output files, and not scanned in image format from hard copy reports.

#### **4. How to tell if your file is too big:**

Most complete applications for a single test group should not exceed 1 megabyte in size.

For larger manufacturers who submit separate "General Sections", the total file size should range between 3 and 5 megabytes.

If your applications are larger than this, first make sure you followed the tips given above. If the file size is still too large, it may be because you are submitting information which is not required under 40 CFR 86.1844-01(g) of the CAP 2000 regulations. If you are unsure, contact your certification representative.

## **Enclosure III**

### **Instructions for Entering Data for Tier 2**

The following changes have been made for data input for Tier 2 certification ("Tier 2" in this document will refer to Tier 2 or Interim Non-Tier 2).

- A new field 'Tier 2 Program code' on the E1 record (columns 96-99) of the ESI system is added.
- New codes 'MDPV', 'CVT', and 'FVT' are added for the field 'GVW category code' on the E2 record (columns 49-54).
- Added new codes for Tier 2 for the field 'Tier' on the EG record (column 11-14).
- Added a new field 'Reactivity Factor' on the EG record (columns 70-74).
- Added a new 'vehicle class code' to Exhibit 4-2 in the CMUG (for columns 56-57 of the E2 record)
- New codes have been added for the field 'Evaporative/Refueling Standard' on the PS (columns 9-12) record.
- The new fuel type code '61' is created for the 'VI Fuel Type' field for VI (columns 8-9 of the VT record) and for MTDS (columns 48-49 of the T2 record)

The following three changes are not related to Tier 2.

- A new field 'Humidity' is added to the 'T3' record (column 57-63) of MTDS
- The PF record is removed from the Evaporative System input form.
- The 'Exhaust Emission Standard Code' (columns 9-10 on the ES record) is no longer required.

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#### 1. Sales area code for Tier 2.

Use sales area code 'FA' where Tier 2 standards are to be met for the 49-state sales area. Sales areas that may apply when a test group is to be certified to Tier 2 standards are:

- FA - Tier 2 standards or (Interim non-Tier 2 and Tier 1 standards)
- FC - Combination code for 49-state and California for Tier 2 standards
- CA - California (LEV programs or Tier 2)
- CF - Clean Fuel Vehicle area
- NL - NLEV sales area

Possible combinations of sales areas that may apply to the Test Group, Vehicle Information and Summary Sheet data entry in conjunction with Tier 2 standards are:

- FA - Federal Tier 2 or (Interim non-Tier 2 and Tier 1)

FA/CA - FA and California  
 FC - Federal/California Tier 2  
 CF/CA/FA - Clean Fuel Vehicle, California and FA  
 CF/FC - Clean Fuel Vehicle and (Federal/California Tier 2)  
 CF/FA - Clean Fuel Vehicle and FA  
 FA/NL - Tier 2 and NLEV  
 FA/NL/CA - Tier 2, NLEV and California  
 FA/CL - Tier 2 and NLEV/California  
 FC/NL - Federal/California Tier 2 and NLEV  
 FA/NL/CF - Tier 2, NLEV and Clean Fuel Vehicle  
 FA/NL/CF/CA - Tier 2, NLEV, Clean Fuel Vehicle and California  
 FA/CL/CF - Tier 2, NLEV/California and Clean Fuel Vehicle  
 FC/NL/CF - Tier 2, NLEV and Clean Fuel Vehicle  
 FA/NF - Tier 2, NLEV, California and Clean Fuel Vehicle

Combination codes FC, CL and NF may be used when the same standards apply to all the component sales areas.

## 2. ESI

- A new field 'Tier 2 Program code' is added to E1 record (column 96-99) as follows:

		Transaction Type										
Field Name	Record Type	Add	Modify	Replace	Delete	Report	Cancel	Reactivate	Position	Length	Data Type	Valid Range/Entry Criteria
Tier 2 Program	E1	X	X	X					96-99	4	A	T2 - Tier 2 INT - Interim Non-Tier 2 blank or 'NA' - Not applicable

- E2 (49-54) GVW category - new codes are as follows:
  - MDPV - Medium Duty Passenger Vehicles
  - FVT - Federal Light Duty Vehicle or Truck
  - CVT - California Light Duty Vehicle or Truck
- ES (9-10) Exhaust Emission Standard Code - is no longer required.
- EG (11-14) Tier - The following is added.
  - B1 - Bin 1 (Federal Tier 2 or Interim Non-Tier 2 Bin 1 Standards)

B2 - Bin 2 (Federal Tier 2 or Interim Non-Tier 2 Bin 2 Standards)  
 B3 - Bin 3 (Federal Tier 2 or Interim Non-Tier 2 Bin 3 Standards)  
 B4 - Bin 4 (Federal Tier 2 or Interim Non-Tier 2 Bin 4 Standards)  
 B5 - Bin 5 (Federal Tier 2 or Interim Non-Tier 2 Bin 5 Standards)  
 B6 - Bin 6 (Federal Tier 2 or Interim Non-Tier 2 Bin 6 Standards)  
 B7 - Bin 7 (Federal Tier 2 or Interim Non-Tier 2 Bin 7 Standards)  
 B8 - Bin 8 (Federal Tier 2 or Interim Non-Tier 2 Bin 8 Standards)  
 B9 - Bin 9 (Federal Tier 2 or Interim Non-Tier 2 Bin 9 Standards)  
 B10 - Bin 10 (Federal Tier 2 or Interim Non-Tier 2 Bin 10 Standards)  
 B11 - Bin 11 (Federal Tier 2 or Interim Non-Tier 2 Bin 11 Standards)  
 L2 - LEV-II LEV (California LEV-II LEV Standards)  
 L20 - LEV-II Opt 1 (California LEV-II LEV/Option 1 Standards)  
 U2 - LEV-II ULEV (California LEV-II ULEV Standards)  
 S2 - LEV-II SULEV (California LEV-II SULEV Standards)

- A new field 'Reactivity Factor (RAF)' is added to EG record (column 70-74) as follows:

		Transaction Type										Valid Range/Entry Criteria
Field Name	R e c o r d  T y p e	A d d	M o d i f y	R e p l a c e	D e l e t e	R e p l a c e	C a n c e l	R e a c t i v a t e	P o s i t i v e	L e n g t h	D a t a  T y p e	
Reactivity Factor(RAF)	EG	X	X	X					70-74	5	R	Reactivity Factor (NMOG, Methane) Note: For Tier 2 (Bin 1 through 11) emissions it will be defaulted to 1.0.

If no value is entered in the field it will default to 1.0 for NMOG and 0.0 for methane.  
 For any tier 2 bin number, it will default to 1.0 for NMOG and 0.0 for methane.

For example, if a test group is to be certified to tier 2 standards for 49-state(sales area 'FA')  
 and to applicable California standards:

- The NMOG emission should be entered as measured without RAF applied.
- Applicable RAF should be entered for California sales area.
- RAF of 1.0 for NMOG and 0.0 for methane( if CNG vehicle) may be entered for 'FA' sales area for Tier 2 standards compliance or they may be left blank as the software will default to respective values for Tier 2 bin numbers.

Certification level for NMOG will be calculated as follows:

$$\text{Cert Level} = \text{ASTM}(x) [ \text{ASTM}(y) (\text{NMOG} * \text{RAF}_{\text{NMOG}} + \text{Methane} * \text{RAF}_{\text{Methane}}) * \text{Multiplicative DF}_{\text{NMOG}} + \text{Additive DF}_{\text{NMOG}} ]$$

x - Round to the same number of significant digits to the right of decimal point as the NMOG emission standard.

y - Round to one digit beyond the significant digits to the right of decimal point as the NMOG emission standard.

Emission results NMOG and Methane in the equation are unrounded results.

If the emission 'Methane' does not apply, the term with methane is set to zero.

- Vehicle class code (Exhibit 4-2) in CMUG : The following is added:  
(to be entered in columns 56-57 of E2 record of the ESI subsystem)

Code	Fuel	GVWR	ALVW	LVW	Vehicle Class
MD	Any	8501-9999	Any	Any	MDPV

### 3. EvSI

- PF record is removed. -If these records are entered, the transactions will be rejected.
- PS record Evaporative/Refueling Standard (Col 9-12): New codes are added as follows.

Field Name	Transaction Type								Position	Length	Data Type	Valid Range/Entry Criteria
	Record Type	Add	Modify	Replace	Delete	Report	Cancel	Reactivate				
Evaporative/Refueling Standard	PS	R		R					9-12	4	A	T2 - Federal Tier 2 C2 - California LEV-II ZZ - California LEV-II Zero Evap

### 4. VI

- New 'VI fuel type code' (VT record, columns 8-9) code '61' is added:  
61 = Tier 2 unleaded (at EPA - 96 RON and 15-45 ppm sulfur)

## 5. MTDS

- New 'VI fuel type' (T2 record, columns 48-49) code '61' is added:  
61 = Tier 2 unleaded (at EPA - 96 RON and 15-45 ppm sulfur)
- A new field 'Humidity' is added to T3 record as follows:

		Transaction Type											
Field name	Record Type	Add	Modify	Replace	Delete	Report	Carry-Over	Carry-Across	Reprocess	Position	Length	Data Type	Valid Range/Entry Criteria
Humidity	T3	X	X	X						57-63	7	R	000.000 to 999.999 Humidity in grains per pound of dry air